a nonmagnetic spacer layer,

first and second ferromagnetic layers separated by the nonmagnetic spacer layer, the first ferromagnetic layer having a magnetization direction at an angle relative to a magnetization direction of the second ferromagnetic layer at zero applied magnetic field, the magnetization of the first ferromagnetic layer freely rotating in response to a magnetic field signal; and

a nonmagnetic high-conductivity layer disposed in contact with the first ferromagnetic layer so that the first ferromagnetic layer is disposed between the nonmagnetic spacer layer and the nonmagnetic high-conductivity layer, wherein

the nonmagnetic high-conductivity layer and the second ferromagnetic layer have a respective film thickness so that wave asymmetry, (V1-V2)/(V1+V2), is in the range of negative 0.1 and positive 0.1, in which V1 is the peak value of reproduction output in a positive magnetic field signal and V2 is the peak value of reproduction output in a negative magnetic field signal.

23. The magnetoresistance effect element of claim 22, wherein the first ferromagnetic layer has a film thickness between 0.5 nanometers and 4.5 nanometers.

24. The magnetoresistance effect element of claim 22, wherein the nonmagnetic high-conductivity layer has a film thickness t (HCL) in terms of copper (Cu) layer of specific resistance

10 microohm centimeter, the second ferromagnetic layer has a magnetic film thickness tm (pin1) in terms of saturation magnetization of 1Tand the t (HCL) and tm (pin1) satisfy conditions of 0.5 nanometers ≤tm (pin1)+t (HCL)≤4 nanometers and t (HCL)≥0.5 nanometers.

25. The magnetoresistance effect element of claim 22, wherein the second ferromagnetic film is disposed adjacent to the nonmagnetic spacer layer via the first ferromagnetic film, the second ferromagnetic layer comprises first and second ferromagnetic films antiferromagnetically coupled to one another and an antiferromagnetically coupling film located between and in contact with the first and second ferromagnetic films for coupling the first and second ferromagnetic films together antiferromagnetically,

the nonmagnetic high-conductivity layer has a film thickness t (HCL) in terms of copper (Cu) layer of specific resistance 10 microohm centimeter,

the first and the second ferromagnetic films have a magnetic film thickness tm(pin1) and tm(pin2), respectively, in terms of saturation magnetization of 1 Tesla and,

t (HCL), tm (pin1), and tm (pin2) satisfy conditions of 0.5 nanometers ≤tm (pin1) - tm (pin2)+t (HCL)≤4 nanometers and t (HCL)≥0.5 nanometers.

26. A magnetoresistance effect element, comprising:

a nonmagnetic spacer layer,

first and second ferromagnetic layers separated by the nonmagnetic spacer layer, the first ferromagnetic layer has a magnetization direction of the first ferromagnetic layer at an angle relative to a magnetization direction of the second ferromagnetic layer at zero applied magnetic field, the magnetization of the first ferromagnetic layer freely rotating in a magnetic field signal; and

a nonmagnetic high-conductivity layer disposed in contact with the first ferromagnetic layer so that the first ferromagnetic layer is disposed between the nonmagnetic spacer layer and the nonmagnetic high-conductivity layer, wherein

the nonmagnetic high-conductivity layer has a film thickness t (HCL) in terms of Cu layer of specific resistance 10 microohm centimeter, the pair of ferromagnetic films have a magnetic film thickness tm (pin1) in terms of saturation magnetization of 1 Tesla and t (HCL) and tm (pin1) satisfy conditions of 0.5 nanometers $\le tm\ (pin1)+t\ (HCL) \le 4$ nanometers and $t(HCL) \ge 0.5$ nanometers.

27. The magnetoresistance effect element of claim 26, wherein the nonmagnetic high-conductivity layer contains a metal element selected from the group consisting of copper (Cu), gold (Au), silver (Ag), ruthenium (Ru), iridium (Ir), rhenium (Re), rhodium (Rh), platinum (Pt), palladium (Pd), aluminium (Al), osmium (Os), and nickel (Ni).

28. A magnetoresistance effect element, comprising: